

Remarks

Claims 1, 3-9, 13-15 And 18 Are Patentable Over A Combination Of U.S. Patent No. 5,810,698 of Hullett Et Al., U.S. Patent No. 5,601,519 Of Comereski, U.S. Patent Publication No. 2004/0043876 Of Craciunescu And U.S. Patent No. 4,890,604 Of Nelson.

Claims 1, 3-9, 13-15 and 18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,810,698 of Hullett et al. in view of U.S. Patent No. 5,601,519 of Comereski, U.S. Patent Publication No. 2004/0043876 of Craciunescu and U.S. Patent No. 4,890,604 of Nelson.

The Hullett patent describes an exercise device which includes a frame 100 having a pair of rails 151 and 161 which cooperate to guide the movement of carriage 200 with respect thereto.

Attached to carriage 200 is platform 210 having a body supporting surface 211 that "is substantially flat" (column 6, lines 3) and a "partial seat 215" which is fixed with respect to body supporting surface 211 "at an angle approximately 120 degrees relative thereto" (column 6, lines 6-9). Four pairs of rollers 221, 225, 229 and 231 are mounted on the back side of platform 210 for moving the carriage along the rails 151 and 161. In addition, pin 192 may be inserted through holes in the brackets for at least one of the rollers 231 and at least one of the rails 151 and 161 to lock the carriage in place with respect to the rails. The Hullett device also includes a foot support or platform 310, suitable for supporting both feet (as shown in Figure 4), which is attached to a cantilevered bar 321 that is pivotally attached to the frame. The Hullett device also includes right and left levers 420 and 440 which are rotatably connected to the carriage, and which are also connected to flexible lines 461 and 471. These lines engage pulleys 412 and 414 so that rotation of levers 420 and 440 may be translated to linear movement of the carriage

relative to the frame.

The Comerreski patent describes an abdominal exercising machine which includes a base 12 that supports a collapsible platform 14 comprising a flexible semi-rigid mat 26 and an ergonomic cushion 28 which rests on the mat. The platform is pivotally attached to support members 16 of a generally W-shaped carriage 40 having wheels 38 which ride on the upper surface of base 12. A spring 20 attached to the carriage holds the collapsible platform in the resting position shown in Figure 2, whereupon flexing of the user's abdomen lowers the middle section 32 of the collapsible platform against the resistance of the spring, thereby pushing the "middle" two legs of the W-shaped carriage apart (as shown by comparing Figure 3 to Figure 2). As the resistance of the spring is overcome and the large wheels between the spring (as shown in the drawings) move apart, the rightmost wheel of the carriage (pivotally attached to lower end of rightmost rod 16) moves to the right and up inclined surface 43 as the leftmost wheel (which is pivotally attached to the lower end of leftmost rod 16) moves to the left (as shown in the drawings) up an inclined surface on the left side of the base (as illustrated in the drawings). This forces the upper ends of the two rods 16 to move together (as shown by comparing Figure 3 to Figure 2). An adjustable belt 44 is provided to strap the user around the waist to the platform.

The Craciunescu publication describes a therapeutic exercise device comprising a generally rectangular support base 10 having a pair of opposed track rails 12 along the upper surface of the base and a lateral guide track along one side. An L-shaped carriage 16 is mounted on a guide block 14 which is in sliding engagement with opposed track rails 12 so that the carriage can move longitudinally along the support base. A pair of adjustable screw spring plungers 24 are

attached to the downwardly depending side of the carriage and adapted to cooperate with the lateral guide track to provide adjustable resistance to the lateral movement of the carriage on the base. A platform 18, which is removably attached to the top of the carriage, includes a pair of fixed foot supports 18A.

The Nelson patent describes a traction assembly including a stand 14 on which a table assembly 15 is pivotally mounted for rotation about a fixed, lateral, horizontal axis. A motor and drive assembly are provided for oscillating the table assembly with respect to the stand. The table assembly comprises support frame 16 and a patient platform 17 which is slidably mounted to the support frame for back-and-forth longitudinal movement under the influence of gravity. A body strap 43 is provided to secure the patient to the patient platform, and a head restraint assembly 41, which includes head sling 89 and chin strap 95, is adjustably fixed on one end of the support frame. A foot restraint assembly 42 is adjustably mounted on the other end of the support frame and includes straps 111 and 119 to secure the ankles of the patient to ankle cuff assemblies 108 and 109, respectively.

The Office Action states that the Hullett reference discloses an upper carriage section 211 and a lower carriage section 215; however, the Office Action admits that the Hullett reference does not show the upper section pivotally attached to the lower section. Instead, it suggests that the Comerkeski patent teaches this "pivotal attachment" limitation in the form of rods 16. However, component 215 of the Hullett patent is not a "lower carriage section" but a "partial seat" which is fixedly attached to body supporting surface 211 at a 120° angle. Applicant fails to see how component 215 of the Hullett device can perform the function of a "partial seat" if it is pivotally

attached to body supporting component 211. Therefore, Applicant suggests that the Hullett patent teaches away from the combination suggested by the Office Action. As the Federal Circuit stated in *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, a prior art reference must be considered in its entirety, including portions that would lead away from the claimed invention. 721 F.2d 1540 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Furthermore, support rods 16 of the Comereski device do not allow or facilitate the pivotal movement of two sections of a carriage with respect to each other, as suggested by the Office Action. Instead, Comereski's rods 16 allow flexible platform 14 to collapse as the user flexes his abdomen against the resistance of spring 20. More particularly, the Hullett rods allow the head and leg sections of a collapsible platform to be raised as the middle section of such collapsible platform sinks to oppose the tension of spring 20.

As the Supreme Court affirmed in *KSR International Co. v. Teleflex Inc.*, the Patent and Trademark Office must still make out a *prima facie* case of obviousness, using the three-prong *Graham* test. 127 S. Ct. 1730 (2007). As stated in the M.P.E.P., there must first be some suggestion or motivation, either in the cited references or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. (§2142). However, neither the Hullett patent nor the Comereski patent, nor any combination of such references with the Craciunescu and/or Nelson references, discloses, suggests or renders obvious a therapeutic exercise device having *a carriage comprising a lower section and an upper section that is pivotally attached to the lower section, which carriage is mounted for sliding*

movement along at least a portion of a support frame, as required by Applicant's claims 1, 3-9, 13-15 and 18.

With respect to claim 7, the Hullett patent describes a single fixed foot rest and the Craciunescu reference describes a pair of fixed foot rests. However, neither the Craciunescu patent application nor the Hullett patent, nor any combination of such references with the Comereski and/or Nelson patents, describes, suggests or renders obvious a therapeutic exercise device which includes *a left foot rest and a right foot rest, each of which may be independently pivoted between an angle of 0° with respect to the support frame and an angle of about 90° with respect to the support frame*, as required by Applicant's claim 7.

With respect to claim 8, Applicant admits that the Hullett patent discloses "pin 192 [that] may be inserted through holes in the brackets for at least one of the rollers 231 and in at least one of the rails 151 and 161 to lock the carriage 210 in place with respect to the rails 151 and 161" (column 6, lines 34-38). However, such locking mechanism does not limit the sliding motion of the carriage. Instead, it eliminates the sliding motion by locking the carriage to the rails.

Consequently, neither the Hullett patent, nor any combination of such patent with the Comereski and/or Nelson patents and/or the Craciunescu patent application, describes, suggests or renders obvious a therapeutic exercise device which includes *a range of motion stop that is adjustably mounted on the support frame and adapted to limit the sliding motion of the carriage at a plurality of locations on the support frame*, as required by Applicant's claim 8.

With respect to claim 9, Applicant admits that the Hullett patent discloses a partial seat 215 which is fixed with respect to platform 210 "at an angle approximately 120 degrees relative thereto" (column 6, lines 6-9). However, nothing in the Hullett patent suggests that this partial seat 215 may be removably mounted to the carriage. Consequently, neither the Hullett patent, nor any combination of such reference with the Craciunescu application and/or the Comereski and/or Nelson patents, describes, suggests or renders obvious a therapeutic exercise device which includes *an upper leg support that is removably mounted on the carriage*, as required by Applicant's claim 9, as amended.

With respect to claims 13 and 14, the Office Action suggests that lower end of rail 152 and trunnion 154 of the Hullett device comprise a "tilt mechanism". However, such structural components do not comprise any part of a *tilt mechanism that is adapted to pivot the upper section of the carriage with respect to the lower section*, as required by Applicant's claims 13 and 14. Furthermore, nothing in the Hullett patent, nor any combination of such reference with the Craciunescu application and/or the Comereski and/or Nelson patents, describes, suggests or renders obvious a therapeutic exercise device which includes such a tilt mechanism as is described in Applicant's claims 13 and 14.

With respect to claim 18, the Office Action suggests that Figure 5 of the Hullett reference discloses a "digital readout". However, the electronic display monitor of Figure 5 displays "exercise data, such as speed and frequency of exercise movement" (column 9, lines 46-64). Furthermore, neither the Hullett patent, nor any combination of such reference with the Craciunescu application and/or the Comereski and/or Nelson patents, describes, suggests or

renders obvious a therapeutic exercise device which includes any mechanism or device for measuring the force that is applied to the foot rest. Consequently, nothing in these references, taken singly or in combination, discloses, suggests or renders obvious a *left digital readout for displaying the forces that are applied to the left foot rest and a right digital readout for displaying the forces that are applied to the right foot rest*, as required by Applicant's claim 18. Furthermore, since claim 18 depends from claim 17, and claim 17 has been allowed, Applicant suggests that claim 18 must also be allowed.

For the reasons set forth herein, Applicant requests that this rejection of his claims 1, 3-9, 13-15 and 18 be withdrawn, and that claims 1, 3-9, 13-15 and 18 be allowed.

Claims 10 And 11, As Amended, Are Allowable

Objection has been raised to claim 10 as being dependent on a rejected base claim. Applicant has now amended claim 10 (and by dependency therefrom, claim 11) to incorporate therein the limitations of claim 1 from which claim 10 depends.

Applicant respectfully submits that all of his claims are patentable over the cited references. Applicant requests, therefore, that the §103(a) rejection of claims 1, 3-9, 13-15 and 18 be withdrawn, the objection to claim 10, as amended, be withdrawn, and that claims 1-8, 11-16 and 18-20, as originally presented, and claims 9, 10 and 17, as amended, be allowed. If the Examiner has any questions about this Response, she is invited to call Applicant's attorney at the telephone number set out below.

Respectfully submitted,



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